

III. *Offis Bregmatis Giganteæ Magnitudinis*
Icon; cum Problemate de Gigantis Statura
determinanda secundum Regulas Artis Deli-
neatoriae: quæ ad Illustr. REGALIS SO-
CIE TATIS Præsidem D^{um} Hans Sloane,
Bart. transmisit Jac. Theodor. Klein Rei-
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Soc.

EX celebri museo, quod Amstelodami fuit, Wittseniano, os bregmatis giganteum *, cuius altitudo 9 poll. Angl. latitudo 7 (TAB. I.) una cum descriptione & adjuncta figura †, altitudinem capitum a mento ad verticem 20 poll. latitudinem ad tempora 12 poll. (TAB. II.) repræsentante, necnon aliud ejusmodi os, cuius altitudo 5 $\frac{6}{8}$ poll. Angl. latitudo 5 poll. sed sine figura & relatione ad caput anno 1728 naectus, facile invenire potui, assūmtis secundum regulas artis delineatoriae octo capitum altitudinibus, statutam gigantis fuisse 13 ped. 4 poll. alterius vero offis bregmatis, quod insolitum quoque simulabat caput, justam rationem & quidem juxta regulas mathematicas scire cupidus, viro excellentissimo *Henrico Kühn, J. U. D. & Athenæi Dantiscani* mathef. P. P. meritissimo, sequens proposui Problema :

* *Vid. Catal. Mus. Wittsen. p. 82.*

† *A pie defuncto Ruyfckio comparatis.*

Si in duobus corporibus humanis diversæ staturæ fuerit,

In Priore,

Ossis bregmatis altitudo 9 poll. Angli.
_____ latitudo 7.

Integri capitidis altitudo 20.
_____ latitudo 12.

In Posteriore,

Ossis bregmatis altitudo $5\frac{6}{7}$ seu $\frac{46}{7}$ poll. Angl.
_____ latitudo 5.

Integri capitidis altitudo ignota.
_____ latitudo ignota.

Determinare ignotum, & rationem staturæ prioris ad posteriorem definire.

C U J U S T R I P L E X R E S O L U T I O , hæc :

Si corpora ista forent similia, res brevissime expediri posset, inferendo; ut in priore corpore, ossis bregmatis altitudo ad integri capitidis, vel etiam integri corporis, (tanquam illius octuplam) altitudinem, ita in posteriore corpore, ossis bregmatis altitudo vel latitudo ad integri capitidis, vel etiam integri corporis, altitudinem quæsitam; quoniam vero 9 ad 7, & $\frac{46}{7}$ ad 5 sunt rationes dissimiles, corpora ista similia non sunt. Quamobrem opus est, ut in calculo & altitudinem & latitudinem ossium bregmatis ratio habeatur; uti ex triplici methodo subiecta apparebit.

METHODUS PRIMA.

(Fiat α .) $9'' : 20'' = \frac{46''}{8} : \left\{ \begin{array}{l} \text{altitud. capitis quæsitam} \\ \frac{20 \cdot 46''}{9 \cdot 8} \end{array} \right.$

erit hujus octuplum $= \frac{8 \cdot 20 \cdot 46''}{9 \cdot 8} = \frac{20 \cdot 46''}{9} = \frac{920''}{9}$
 $= 102 \frac{2}{9} \left\{ \begin{array}{l} = 8 \text{ ped. } 6 \frac{2}{9} \text{ poll.} \\ = \text{staturæ corporis secundi.} \end{array} \right.$

(Fiat β .) $7'' : 20'' = 5'' : \left\{ \begin{array}{l} \text{altitud. capitis quæsitam;} \\ \frac{100''}{7} \end{array} \right.$

erit hujus octuplum $= \frac{800''}{7} = 114 \frac{2}{7} = 9 \text{ ped. } 6 \frac{2}{7} \text{ poll.}$
 $= \text{staturæ corporis secundi.}$

(Fiat γ .) Staturarum inventarum additio, & summae
 bisectione, pro obtinendo medio arithmeticō, erit

$$\frac{8', 6'' \frac{2}{9} + 9', 6'' \frac{2}{7}}{2} = \frac{17', 12'' \frac{1}{2}}{2} \text{ quam prox.}$$

$$= \frac{18' + \frac{1}{2}''}{2} \left\{ \begin{array}{l} = 9 \text{ ped. } \frac{1}{4} \text{ poll.} \\ = \text{structuræ corporis secundi proxime verae.} \end{array} \right.$$

METHODUS SECUNDA.

(Fiat) $9'' + 7'' : \frac{46''}{8} + 5'' = 20''$: altitud. capitis
[posterioris.

$$\text{h. e. } 16 : \frac{46 + 40}{8} = 20'' : \text{ : : : : }$$

$$\text{h. e. } 16 : \frac{86}{8} = 20'' : \left\{ \begin{array}{l} \text{altitud. capitis posterioris} \\ \frac{20. 86''}{16. 8} = \frac{5. 86''}{4. 8} = \frac{430''}{32} = \frac{215''}{16} \end{array} \right.$$

$$\text{erit hujus octuplum} = \frac{8. 215''}{16} = \frac{215''}{2} = 107\frac{1}{2}''$$

$$\left\{ \begin{array}{l} = 8 \text{ ped. } 11\frac{1}{2} \text{ poll.} \\ = \text{staturæ corporis se-} \\ \text{cundi proxime veræ.} \end{array} \right.$$

Id quod cum priori calculo sic satis consentit, cum differentia $\frac{3}{4}$ pollicis non excedat.

METHODUS TERTIA.

Quoniam in diversorum corporum partibus cognominibus (e. g. in duobus ossibus bregmatis) superficies partium sunt inter se, ut quadrata altitudinum corporum integrorum; nec minus superficies istæ sunt inter se, ut facta ex altitudinibus partium in latitudines: erunt etiam facta ex altitudinibus partium in suas latitudines inter se, ut quadrata altitudinum corporum integrorum. Quare, cum altitudo corporis prioris sit $20''$, adeoque ejus octuplum, seu altitudo in-

integri corporis prioris, sit $160''$, cuius quadratum est $25600''$, fiat

$$\begin{array}{l}
 \text{altitd. bregmat.} \\
 \text{prioris.} \\
 \text{in} \\
 \text{9} \quad \bullet \quad 7 \quad : \quad \frac{46}{8} \quad \text{altitd. bregm.} \\
 \qquad \qquad \qquad \text{posterior.} \\
 \text{ejus latitud.} \\
 \text{in} \\
 \text{ejus latitud.} \\
 \text{quadratum alti-} \\
 \text{tudinis, prioris} \\
 \text{corporis integri.} \\
 \text{quadratum alti-} \\
 \text{tudinis, poste-} \\
 \text{rioris corporis} \\
 \text{integri.} \\
 \hline
 \end{array}$$

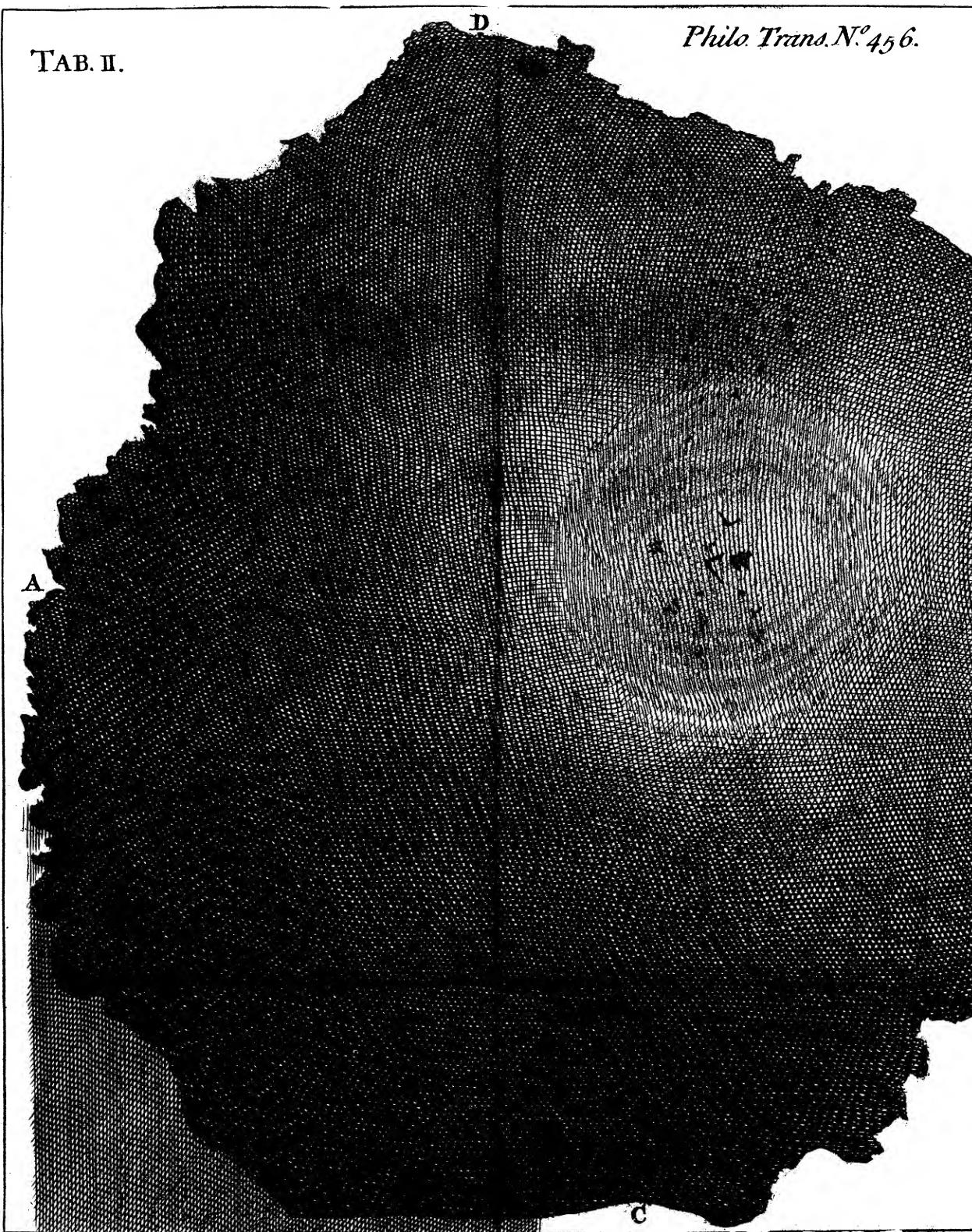
$$\text{h. e. } 63 : \frac{230}{8} = 25600'' : \frac{230 \cdot 25600''}{63 \cdot 8} = \frac{230 \cdot 3200''}{63}$$

$$\text{Cum itaque sit } \frac{230 \cdot 3200''}{63} = \frac{736000''}{63} = 11682'' \frac{1}{63}$$

quam proxime, = quadrato staturæ corporis secundi;
 erit (radice quadrata ex 11682 extracta) ipsa corporis secundi statura quam proxime vera $= 108 = 9$ ped. o
 poll. Angl. Quæ ipsa statura, cum sit inter supra inventas media, pro accuratissima est habenda.

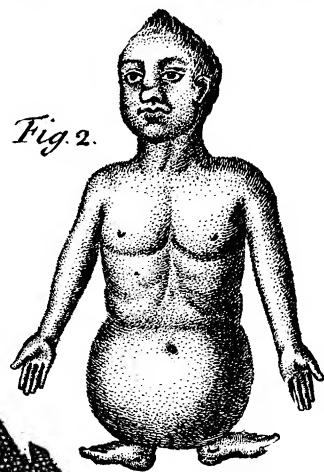
Denique, cum octo capitis altitudines pro statura corporis humani integri satis recte assumere soleamus, & capitis gigantei prioris altitudo sit 20 poll. Angl. erit statura gigantis prioris $= 8 \cdot 20'' = 160'' = 13$ ped. 4 poll. Angl. Consequenter statura gigantis prioris est ad staturam posterioris, ut 13 pedes, 4 pollices ad 9 pedes in mensura Anglicana, seu ut $160''$ ad $180''$ seu ut 40 ad 27 .

TAB. II.



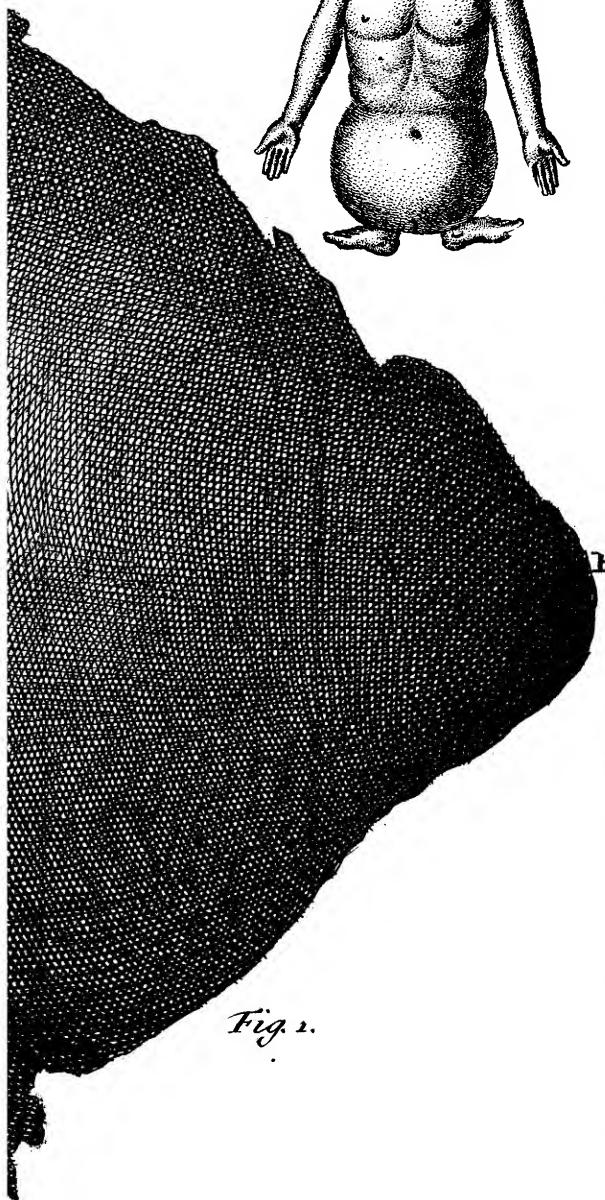
6.

Fig. 2.



B

Fig. 1.



J. Mynde Sculp.

TAB. I.

Phila.



Philos. Trans. N° 456.

Fig. 2.



Fig. 1.

Text 2.

Plat. Seven. N^o 46.



Table 1

Endothelial Cells

Fig. 1

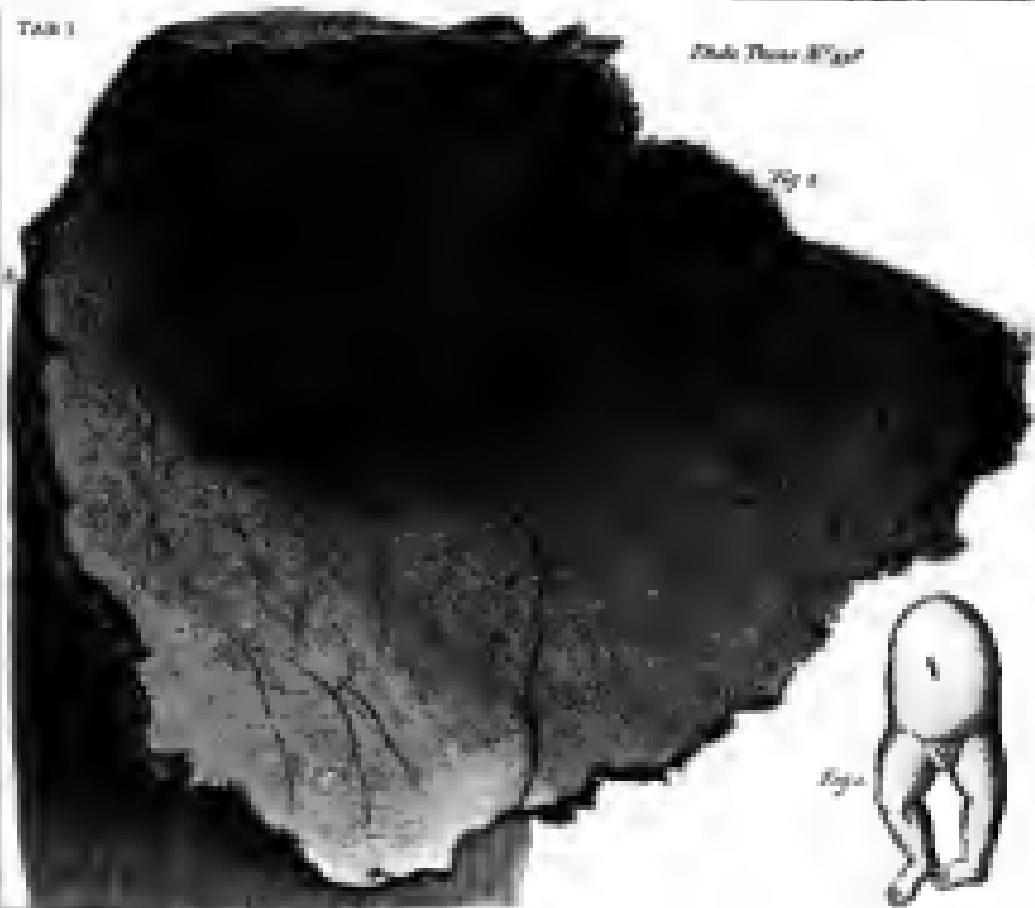


Fig. 2

